VIRGINIA WILDLIFE

JANUARY 2011 FOUR DOLLARS

Subsistence to Sport • Sea Duckin' • Into New Terrain

JANUA

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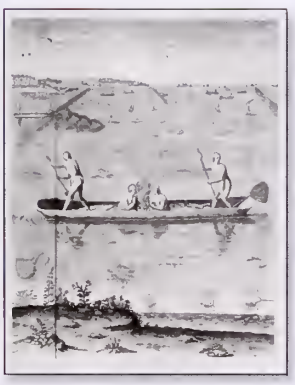

Whitetop Mountain ©John Ross

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ABOUT THE COVER: Migrating Northern pintails arrive in coastal Virginia by mid-December. While not common, some overwinter in the vast tidal marshes of the Chesapeake Bay. © John R. Ford

BOB DUNCAN
Executive Director

January arrives with little fanfare, yet reminds us that we are starting anew and have an opportunity to reflect on the direction in which we are headed. This mental exercise reminds me of all the people who have given me so much through their friendship and mentorship.

Like many folks, my family—and my grandfather, in particular—was most responsible for my interest and love affair with wildlife, with guns and hunting, and with the great outdoors. My paternal grandfather was born in Floyd County. He was an accomplished gunsmith and boat builder, an avid hunter and fisherman, and a man of infinite patience with a wanna-be like me. He would not own a rifle that would not shoot with supreme accuracy, and he instilled many of those same values in me.

On the professional level, there have been so many people who helped me along the way. My first job as a biologist in the mid-grass prairies of Kansas found me beholden to two veteran game managers who took this green recruit under their wing and helped me learn the ropes. My career path then took me back east of the Mississippi in Tennessee volunteer country. There, both of my bosses were fisheries biologists who were in administrative positions. Those two fellows were wonderful to work for, and they gave me great latitude and encouraged me to try new things. I am indebted to them both.

Back home in Virginia, a number of people in what was then called the Game Commission gave me a hand up in the business of wildlife management. The late Charlie Peery, Joe Coggin, Kit Shaffer, and the late Dick Cross were the team that hired me and thus allowed me to fulfill a lifelong dream of joining this Department. I am also very indebted to Jack Raybourne, who talked me into moving to Richmond. Jack was a great supervisor and a valued friend who was a delight to work with if one could survive his wicked sense of humor. I also owe much to Jack Gwynn, who taught me most of what I know about deer biology and management.

About that same time, the late Jack Randolph, former chairman of our board, accepted a position as deputy administrative director. Jack always liked to quip that he started out at the top and was working his way down the ladder. Mr. Randolph was a retired Army colonel. He was an accomplished outdoor writer and one of the most knowledgeable about the industry of hunting and fishing. As a young upstart, I favored the establishment of a separate archery license and was invited by Mr. Randolph to come before the leadership to make a pitch for it. Mr. Randolph introduced me as having a concept to share with the group, and then-director Cross stated that "…as long as I was not there to promote a separate bowhunting license, I was free to speak." They all had a good laugh. Then we got the bowhunter license supported!

I guess I could fill the pages of this magazine with stories of folks who have mentored me or otherwise helped me along the way. It has been my distinct pleasure to work personally with many of the DGIF folks who have gone before and who, by their deeds, created the foundation of the work that we are honored to do. I thank them and all of our current staff for making this agency such a wonderful place to do work very much worth doing.

I encourage all of you who love the outdoors to pass along your enthusiasm, your talents, and your wisdom to others—because you just never know who you will touch and where it might lead.

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To manage Virginia's wildlife and inland fish to maintain optimum populations of all species to serve the needs of the Commonwealth; To provide opportunity for all to enjoy wildlife, inland fish, boating and related outdoor recreation and to work diligently to safeguard the rights of the people to hunt, fish and harvest game as provided for in the Constitution of Virginia; To promote safety for persons and property in connection with boating, hunting and fishing; To provide educational outreach programs and materials that foster an awareness of and appreciation for Virginia's fish and wildlife resources, their habitats, and hunting, fishing, and boating opportunities.

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From Subsistence to Sport

by Curtis J. Badger

The Library of Virginia

How Hunting and Fishing Evolved in Virginia

POWHATAN
Held this state & fashion when Capt. Smith was delivered to him prisoner 1607

When the first permanent British colonists settled in coastal Virginia, their ability to live off the land was vital to survival. Fishing and hunting were essential to life. But over the years, as Virginia became populated and farms and villages began to spring up, fishing and hunting changed. It no longer was a matter of subsistence, at least for most, but rather sport, and with it came the manners, ethics, and rituals that often mimicked those of the countryside back in England. Wild animals became "game," and the taking of fish for entertainment became "sport" fishing. This two-part series looks at how fishing and hunting helped early colonists survive in an unfamiliar land, and it examines the avenues in which subsistence evolved to become sport.

Hunting and fishing have not always been considered outdoor recreation in Virginia. In the early days of the Jamestown colony, the ability to hunt game, and especially to catch fish, meant the difference between surviving and starving to death. And, sadly, in a landscape where game was abundant and fish and shellfish were there for the taking, many did die. Only 60 of the original 214 Jamestown settlers survived the "starving time" of the winter of 1609.

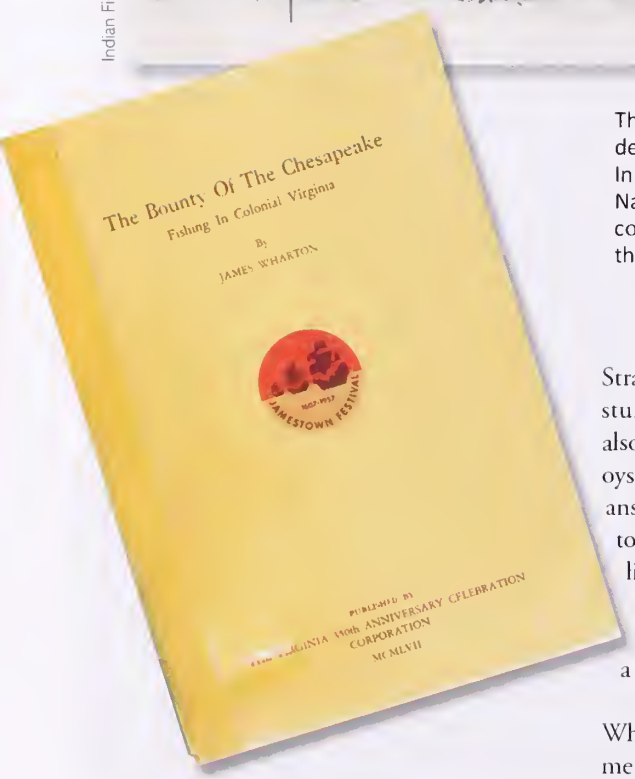
Virginia's first colonists were men of varied backgrounds, but they were not skilled at survival. They were not fishermen, and they were not equipped to succeed in a wilderness undertaking. Lists of original settlers include barbers, bricklayers, jewelers, perfumers, and laborers, as well as numerous "gentlemen," but few who were hunters or fishermen or boat builders. James Wharton wrote a booklet titled *The Bounty of the Chesapeake–Fishing in Colonial Virginia* as part of an educational packet marking the 350th anniversary of the Jamestown settlement in 1957. Wharton depicted early settlers as inexperienced fishermen, who, despite the rich presence of finfish and shellfish in local waters, often died of starvation.

Visits to the New World prior to the Jamestown settlement painted a picture of great bounty. Thomas Heriot accompanied Sir Walter Raleigh when he explored Roanoke Island, North Carolina, in 1585 and wrote of a wealth of sturgeon, herring, and many other fish, as well as crabs, oysters, tortoises, mussels, and scallops. The native people caught fish in weirs made of strong reeds, Heriot wrote, and they speared them from boats or while wading in shallow waters.

Captain Samuel Argall, who was specially commissioned by England to fish off the coast to support the Jamestown colony, visited the barrier islands of Virginia in 1610 and reported "a great store of fish, both shellfish and others."

MAP: John Smith's "Virginia." Courtesy of www.VirtualJamestown.org

Indian Fishing by De Bry. Courtesy of www.VirtualJamestown.org



This 1957 book by James Wharton describes life in the early Virginia colony. In it, Wharton emphasizes the role that Native Americans played in teaching colonists fishing techniques critical to their survival.

A 1612 account written by William Strachey told of "great shoals of herring and sturgeon" and shad a yard long. Strachey also described what might be the original oyster stew or seafood chowder. The Indians, he said, would boil oysters and mussels together in the same pot and thicken the liquid with "the flour of their wheat." So it could be that we have Native Americans to thank for the practice of making a "roux" to thicken soups and stews.

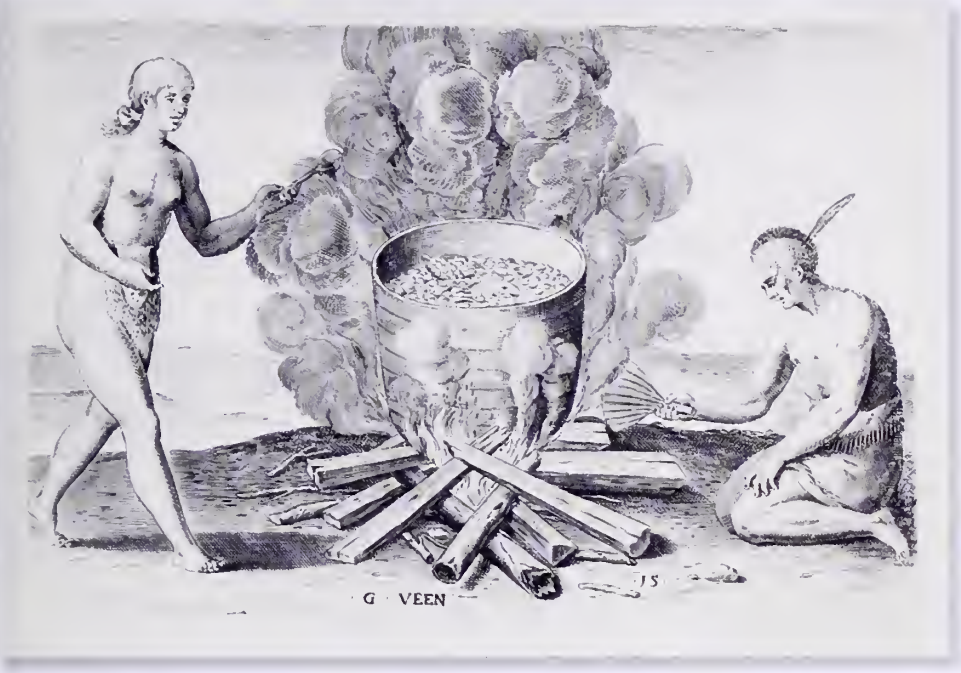
Wharton wrote that Alexander Whitaker in 1613 made the first recorded mention of "torope," or small turtle. The term originated with the Native Americans and referred to the diamondback terrapin, which was unknown in Europe but was to become "an indispensable course on menus designed for the entertainment of royalty and the discriminating elect."

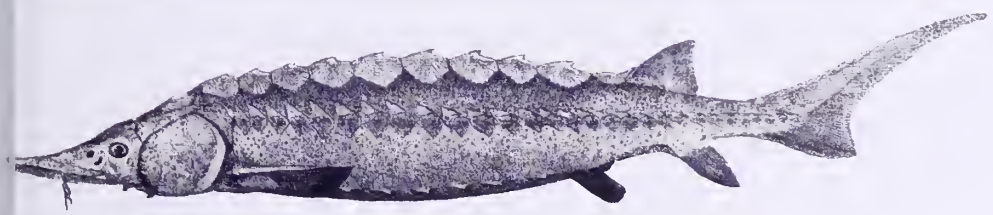
Reports of the abundance of marine life were probably valid, according to Wharton. But…"The infinite plenty was one thing," he wrote. "Making constant and profitable use of it was another."

Early colonists along the bay were not knowledgeable fishermen; they had few if any boats suitable for fishing; and they had no means of preserving what they did catch for use at a later time. And instead of planting garden plots for food, they raised tobacco, which they believed a more profitable commodity. And so there was hunger in a land of plenty. Luckily, for a while Native Americans were willing to help them out. "The Indians had taught them how to spear large fish and erect weirs out of stakes and brushwood to ensnare migrating schools," wrote Wharton. "Such methods worked well enough during the season. But in cold weather, when provisions ran low, scarcely any fish were present in the bay proper."

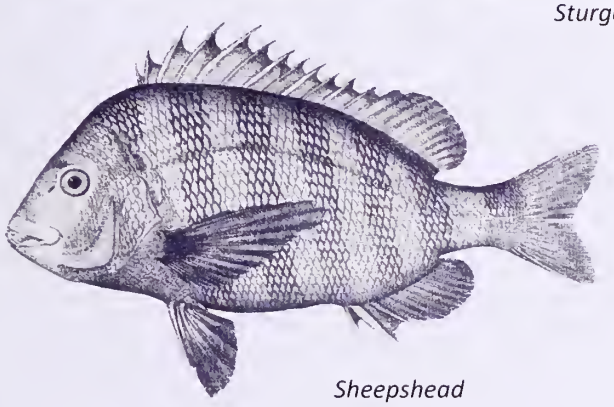
Within a few years, those setting sail from England to the New World were better prepared. Some had experience in fishing, net making, boat building, and salt making. On Smith Island in Northampton County on the Eastern Shore, salt was made by evaporating sea water, and this important commodity helped preserve fish and other food for the Jamestown colony. Still, at least 20 years passed before fishing became a part of the daily life of the community. Instead, the people of Jamestown traded with settlers in New England and Canada, importing salted fish in exchange for other commodities, usually tobacco. From this came what is possibly Virginia's first law regarding fisheries management. In August, 1623 the governor and council of Virginia passed a proclamation to prevent price gouging on fish brought in from New England.

But as the population grew and as people began to realize what a valuable resource they had, Virginians no longer depended upon imported fish. Fishing became a commercial venture as well as a matter of subsistence. A 1649 account attributed the population of Virginia at more than 15,000 in numerous settlements, with boats of many



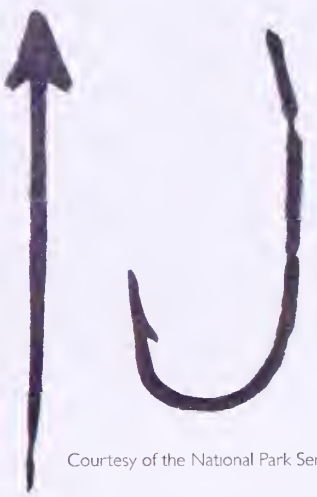


Sturgeon



Sheepshead

Courtesy of the U. S. Fish and Wildlife Service



Courtesy of the National Park Service

Sturgeon and sheepshead are among the fish species mentioned in great abundance in early accounts of the Chesapeake Bay.

sizes and purposes, most of which dealt with fishing. As fishing grew in commercial importance, colonists took steps to bar Native Americans from coastal waters, a step that increased the enmity between natives and colonists, and, inevitably, laws were passed to govern the taking of fish.

Laws were enacted for the same reasons most societies need laws: because of greed, laziness, or just plain stupidity. In 1678 Middlesex County passed a law prohibiting the taking of fish at night using gigs or harping irons. It seems that some local "sports" had been using lanterns to spot fish in shallow water and then gigging them, "wounding four times more than they can take" and thus ruining the fishing for those who use hook and line, the complaint charged.

As the population along the bay became more dense, it became necessary to pass laws to define rights previously unquestioned. In 1679 Robert Liny complained to the General Assembly that he had cleared riverfront land on his property in order to fish his seines. Some of his neighbors were taking advantage, using Liny's property to haul their own seines, claiming that the water was His Majesty's and that His Majesty's subjects had the right to fish it. The Assembly ruled that the property owner's right extended to the low water mark, and that while the neighbors had every right to haul their seine in the river, they had no right to come ashore on Liny's property above the low water mark without his permission.

What was probably the first law regulating hunting was passed in 1705, after the seat of government had been transferred to Williamsburg. The Assembly prohibited the sale of fish within a five-mile radius outside of towns in an effort to promote fish markets in towns and to focus commercial development there. The same legislation also prohibited hunting on private land without a license. The license, in this case, was not obtained from the state, but from the landowner himself. The penalty for noncompliance was steep: 500 pounds of tobacco. □

Curtis Badger, whose most recent book is A Natural History of Quiet Waters *(UVA Press), has written widely about natural history and wildlife art. He lives on Virginia's Eastern Shore.*

Next month: market hunting, shorebird shooting, hunt clubs, laws, manners, and the ritual of the hunt.

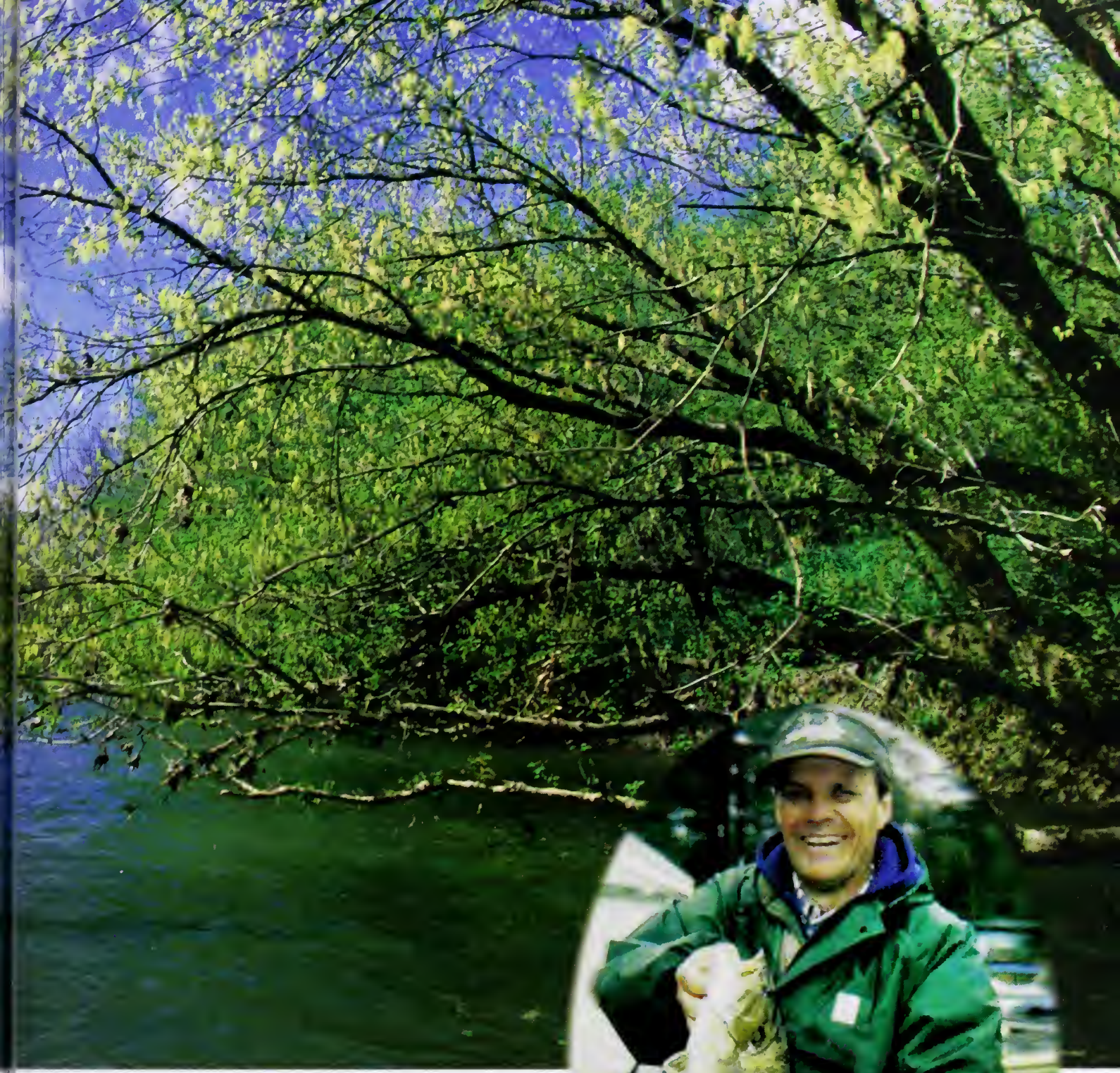
Clinch River Anointing

by Justin Honaker

Tucked deeply in the heart of southwest Virginia, the slow moving Clinch River winds its way in and out of the Blue Ridge Mountains. It roams through these foothills and slows down time, reminding us to appreciate the sights and sounds of a forgotten era when coal once pumped life into what are now ghost towns, and when small general stores—now chipped, gray, and boarded over—provided everything from shoe polish to lemonade. For some, this river has become more than a landmark or a body of water. For some it has become a way of life.

As the water passes over shoal and eddy, you begin to understand this way of life, how it can move a man in the depths of his soul. One such man was Jeff Owen.

The Clinch River captured the heart of Jeff as a young boy in the '50s. He went fishing with his father, and loved the thrill of the catch. Growing up in Cleveland, Virginia, Jeff was always near



Clinch River background ©Dwight Dyke

the river. From childhood on, he spent countless hours wading the waters of the Clinch. As time continued, this hobby that had captivated him became a passion. As with so many, the Clinch River had stolen a part of his heart, and transformed a pastime into a lifestyle.

Jeff Owen was a great fisherman. He had fervor for catching smallmouth bass, or smallies, unlike any other. Over the years, this desire produced a brilliant talent for catching these beautiful fish. Many would say that this passion led to a "blessing" from the

Clinch. Jeff could catch fish when all others had failed. Once, on a Saturday afternoon, Jeff and his son-in-law, Dustan, headed to Nash's Ford, a popular destination on the Clinch. After a couple of hours of fishing in the same spot with identical bait, Jeff had already reeled in around 15 smallies while Dustan was still looking for that first elusive bite. Dustan, slightly frustrated but more amazed, turned and said, "Jeff, you've got the Clinch River anointing." Jeff just laughed and continued fishing.

As is common with any passion, Jeff developed his own idiosyncrasies and his own style of fishing the Clinch River. He was a great believer in seining hellgrammites, the only proper bait for river fishing, and he collected them in a slightly-dented, tin bait can he kept attached to his belt. I still remember him drawing the wriggling bait from his hip, like a pirate sorting through the spoils of a gold pouch. And he was as orthodox about the gear as he was about the bait. Jeff dared not plunk out-of-the-package sinkers into the water before lining them out on cardboard and spray painting the gleaming silver to a nice flat black. He swore the fish could see those sparkly sinkers. Whether or not this is true, and whether or not his friends snickered (they did), many a man would begin to take down a black can of spray paint before the first line was cast—out of pride or paranoia.

There are other quirks some of us know about Jeff. Like most, he loved to catch a fish and eat it; he loved the primal sense a man gets from providing for his family because of his conquests in nature; and he loved bringing home a full cooler for his wife's admiration. But he had a soft spot for fish most fishermen never have, and his method slowly became one of catch-and-release. Beyond the actual release, Jeff developed a sense of respect for the fish. He felt as if the fish told a story with its color, size, and markings. He only kept the fish he intended to eat, and these were never the large fish. In his eyes, some fish were too big to keep. He said that they had been around too long and had seen too much. He was certain that over the years, he caught the same fish from the same spots over and over. Once, Jeff pulled a fish out of the Clinch that had a speckled, hairy lure already lodged in its throat. Jeff recognized it as one of his own. He smiled at the honor, removed both plugs, and let the fish go.

Unlike most fishermen, Jeff loved to fish the winter months. Many days when the temperature was below freezing, Jeff would be headed out with his boat. He would come back with stories that would make any man envious. I remember talking to Jeff on a cold Sunday in January. He was asking about fishing, and I made the comment that I couldn't wait for spring. "Spring?" he replied, "No, *now* is when you catch the big ones." He then went on to tell me about catching two 5-pound-plus smallmouth bass earlier in the week.

It wasn't just the sport of his small cosmos on the Clinch that captivated Jeff. He was interested in the preservation and conservation of the entire river. He could name the streams that fed the Clinch, and follow the bodies of water the Clinch flowed into all the way to the Gulf, as if reading from a memorized map in his mind. Jeff prided himself on the reputation of endangered mussels in the river, which is home to approximately 50 such species, with multiple on the federal endangered species list. It is no surprise that a lifetime of seining hellgrammites often led to the accidental catch of mussels. Years of catching these creatures sparked an interest. Later in his life, he became more interested in the mussel population of the Clinch and avidly studied and searched for these rare findings. Jeff would always stop to appreciate the unique beauty of the river's mussels. He understood the importance of taking care of the river. He made it a point to spread knowledge and appreciation for the abundance of life laid before him.

Later in life, Jeff developed multiple sclerosis, or MS. Over the course of a few years, he began to lose the feeling and mobility in his legs. However, for a man like Jeff, this did not stop his pursuit of the Clinch. He loved the smell, the sound, and the feel of this ancient water. As MS began to take more and more mobility from the man, he refused to surrender this love. Frequently, he would drive down to the river-bank, grab his chair, and stumble out into the water. Here he would sit for hours and feel the cool river run beneath him.

He only kept the fish he intended to eat, and these were never the large fish. In his eyes, some fish were too big to keep. He said that they had been around too long and had seen too much.

Jeff Owen spent his life alongside the Clinch River: from the early days of skipping stones and playing softball on the riverbank, to the many afternoons he would spend later in life on the Clinch, from sundown to near-darkness. Whether he was fishing, seining, telling fish stories with friends, or just breathing the river air, this slow moving river shaped Jeff's life.

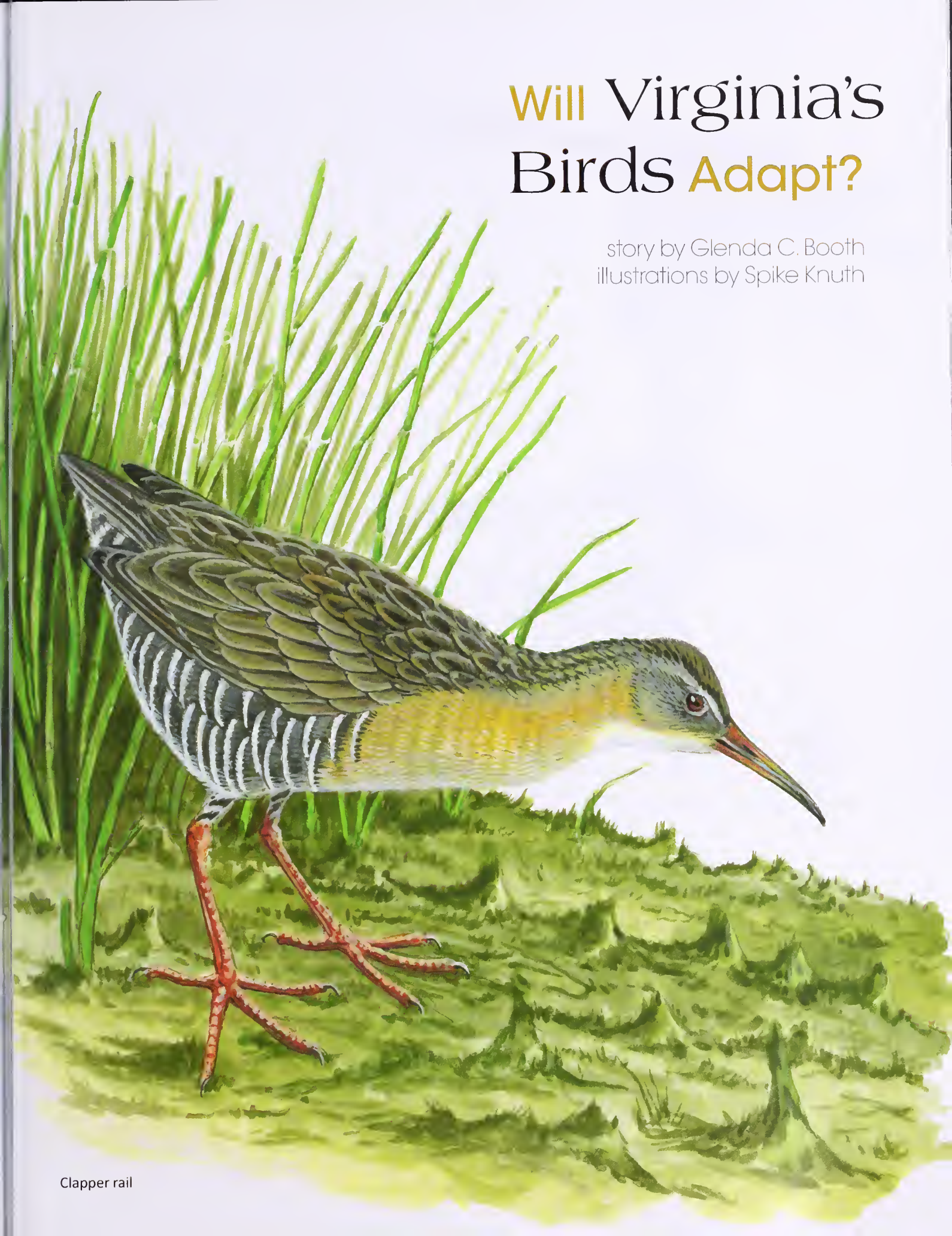
He was a sage among men and made the world a better place for having lived in it. I do believe that the Clinch is a way of life, and Jeff lived it to the fullest. □

Justin Honaker is a graduate of Radford University who enjoys hiking, fishing, kayaking, caving, and other outdoor activities.

©Dwight Dyke

Will Virginia's Birds Adapt?

story by Glenda C. Booth
illustrations by Spike Knuth



Clapper rail

Northern pintails

Some waterfowl are stopping in the Great Lakes instead of flying to their historic Virginia wintering grounds, and fewer are wintering in the Chesapeake Bay. Some plants in Virginia are moving to higher altitudes and latitudes. The water temperature at which many Chesapeake Bay fish spawn or begin migration, 59° Fahrenheit, is occurring earlier than it did 30 years ago.

What's happening? Greenhouse gas emissions are trapping heat in the atmosphere at unprecedented rates, causing climate change, a phenomenon that is changing habitats and animal behavior say scientists from Ducks Unlimited to the National Academy of Sciences.

Ducks Unlimited (DU) biologists Dawn Browne and Randy Dell put it this way: "It is widely accepted by the scientific community that the earth, which has always experienced climate variation, is now undergoing a period of rapid climate change that is enhanced by anthropogenic atmospheric carbon enrichment during the past 100 years." They project extensive warming, changing precipitation patterns, rising seas, changes in the seasons' timing and length, declining snow packs, and increasingly frequent and intense weather events.

In 2007, DU scientists warned that climate change is harming waterfowl in all four flyways. "The nation's duck hunters have a stake in the complex issue of climate change, and future hunting opportunities will rely on our collective ability to accurately assess, predict, and manage the impacts to waterfowl and their habitats," says DU's website.

Global warming is a "triple threat to waterfowl hunting," a 2007 National Wildlife Federation (NWF) study reported, because prairie pothole breeding areas will dry up, some birds will stop in ice-free areas farther north, and those that make it to Virginia will find less shallow water habitat.

Every species occupies a specific niche—defined by habitat, food, and temperature range. Many animals cannot adapt to rapid changes in those conditions. And those that can move may be limited by development, by agricultural practices, and by habitat loss.

Nationally, nearly one-third of 800 bird species are endangered, threatened, or in significant decline and climate change could "dramatically alter their habitat and food supply and push many species towards extinction," announced U.S. Department of Interior Secretary Ken Salazar in releasing the 2010 "State of the Birds" report in March. That analysis echoes the 2007 warning from Ducks Unlimited scientists, who reported that climate change harms waterfowl because of adverse impacts on water in breeding grounds and coastal habitats in all four flyways.

Changes in Virginia

Climate change is altering the natural world in Virginia, concluded Virginia's Commission on Climate Change in 2008, an appointed body that called for action. Commissioners predicted, "... suitable habitat for some species will decline, other

species will become extirpated and other species will become extinct."

Take the Chesapeake Bay where, every year, over one million ducks, geese, and swans stop over or spend the winter. "Average air temperatures in the region have increased by 1.4° Fahrenheit along the coastal margins of the Chesapeake Bay through Maine over the past century, and much of the region has seen about a 10 percent increase in average precipitation, with greater precipitation extremes," reports NWF. The bay's average water temperature went up about 1.4° to 2° Fahrenheit between the 1950s and 2000; sea level has risen; and some marshes and small islands have been flooded, says NWF.

Climate change is affecting birds in several ways.

Shifting Ranges, Distribution

Changing conditions can influence the range and distribution of birds as they seek suitable habitat, food, and temperatures. Some birds can move out of areas no longer suitable; others cannot.

Warming temperatures encourage some birds to move to more hospitable northern latitudes in the winter and cause some species to move farther inland. The brant, ring-necked duck, and American goldfinch have moved about 200 miles north over the past four decades; the red-breasted merganser, 300 miles north; the American black duck, 182 miles north; and the green-winged teal, 157 miles north, according to National Audubon Society scientists.

Lakes and rivers throughout the northern hemisphere are freezing an average of six days later than they did 100 years ago," NWF experts say, so some waterfowl, like tundra swans and canvasbacks, are "short-stopping," they add.

Sea level rise and warmer waters will strain submerged aquatic vegetation—a critical food source for many ducks and geese. Higher water levels reduce sunlight that seagrasses need. Species like redheads, northern pintails, American wigeon, American black ducks, ruddy ducks, and canvasbacks could move or be stressed.

Some neotropical migrant species could face a loss of 22 percent in the Southeast, with goldfinches disappearing from Virginia except for a discrete section of the Appalachian Mountains, reports the American Bird Conservancy.

Ill-suited, Vanishing Habitats

Habitats that cannot tolerate warmer temperatures could vanish or deteriorate.

In the Midwest's pothole "duck factory," less rain and more evaporation could cause wetlands to dry up. The Department of Interior (DOI) pointed out, "... wetland-dependent breeding birds that use them [potholes] appear acutely threatened, especially in the north-central states."

NWF concurred: "More droughts could dry up as much as 90 percent of the Midwest's pothole wetlands, leading to an almost 60 percent decline in breeding waterfowl." The prairie potholes are where

Seaside Sparrow

Resources

Virginia Wildlife Action Plan
www.bewildvirginia.org/wildlifeplan/

Virginia's Strategy for Safeguarding Species of Greatest Conservation Need from the Effects of Climate Change,
www.bewildvirginia.org/climate-change/

The Waterfowlers Guide to Global Warming,
www.nwf.org/birdsandglobalwarming/ducks.cfm

Sportsman's Advisory Group on Climate Change,
www.seasonsend.org/

The State of the Birds: 2010 Report on Climate Change,
www.stateofthebirds.org/

Global Warming and Virginia,
Fact sheet at www.nwf.org

Black ducks

many wintering Chesapeake Bay ducks get their start in life, ducks like redheads and canvasbacks.

Grasslands, too, may become dry and inhospitable to grassland birds like bobolinks and dickcissels that cannot adapt, says the DOI study.

As for forest habitats, Eastern hemlock forests could see the expansion of the hemlock woolly adelgid, a sapsucking insect introduced from Japan in the 1950s that lacks natural predators. Entire hemlock ecosystems could disappear, NWF authorities predict. They are home to the ruffed grouse, pileated woodpeckers, yellow-bellied sapsuckers, goldfinches, crossbills, and grosbeaks.

Ruffed grouse

Birds that live at high altitudes may not be able to move. Isolated locations, like Virginia's high-elevation spruce-fir forests, could become unsuitable for the plants and animals currently there. These populations could be wiped out.

How about wetland birds? Sea-level rise will flood or fragment marshes, beaches, barrier islands, and mudflats. William and Mary scientists Michael Wilson and Bryan Watts wrote that sea level rise will have "profound consequences on the near-shore biological communities of the world." Wetland-dependent birds are especially impacted because they are "spatially restricted to a narrow band between marine and terrestrial environments," the scientists say. The American oystercatcher and salt-marsh sparrow, for example, rely upon low-elevation coastal habitats.

Wilson and Watts predict that salt marshes will be one of the first habitats to be consumed by rising waters. They maintain that sea level rise of 1.3 feet could reduce marsh bird populations by 35–42 percent for the clapper rail, Virginia rail, willet, marsh wren, and seaside sparrow. A 1- to 2-meter rise could reduce their numbers by 80 percent by the year 2100. They forecast possible extirpation of species that rely upon high marsh patches. Northern pintails travel south in winter, expecting to feed in tidal flats on snails and small crabs, but they may find these areas inundated, simply gone.

Mismatched Timing

Birds' migration, reproduction, breeding, nesting, and hatching are highly adapted to match certain conditions such as the availability of food. Climate change can affect the timing of life cycle events that are driven by cues from the environment, especially temperature.

For example, the arrival dates of 20 species of migratory birds were up to 21 days earlier in 1994 than in 1965. Birds like the rose-breasted grosbeak, black-throated blue warbler, and barn swallow were among those impacted, the American Bird Conservancy (ABC) found. Tree swallows are nesting up to nine days earlier than they

did 30 years ago. "These changes may be occurring regardless of whether the birds' arrival is synchronized with the availability of food sources such as insects, flowers, and berries at their destination habitat," maintains ABC.

Seabirds breeding on coasts may be unsuccessful in raising chicks if hatch dates do not match food availability. If migrating shorebirds that stop on the Atlantic coast find fewer invertebrates, they may be unable to gain enough weight to reach their northern breeding grounds. Warmer temperatures will cause shorter winters, altering the timing of vegetation growth patterns which could reduce food and cover at critical points in duck and goose life cycles. In other words, nature's synchronization could be thrown off.

Some Cannot Adapt

Some birds can adapt to change by moving to more hospitable areas, but other birds cannot. Species that require a narrow or limited habitat are often of greatest conservation need. Examples: The black rail can only survive in coastal habitats; the red crossbill can only survive at high elevations; oceanic birds nest on islands. Flooded islands become vanished islands. All 67 oceanic bird species are among the most vulnerable because they nest on islands and do not raise many young each year.

What Can We Do?

Addressing climate change requires action by government, by industry, and by individuals. Reducing greenhouse gas emissions; conserving habitats; protecting bird prey bases and food supplies; and removing threats like invasive plants and animals will help. A major effort to restore grasslands, wetlands, forests, and other types of habitat could go a long way toward saving "Virginia's" birds.

The Department has published two blueprints, the Wildlife Action Plan and the Strategy for Safeguarding Wildlife from Climate Change, available online. In these documents are listed 96 species of greatest conservation need and at risk because of degrading habitat—birds like the American black duck, Northern bobwhite, redhead, brant, American woodcock, and peregrine falcon.

Climate change adds "another suite of stresses to Virginia's habitats … making it that much more difficult to preserve Virginia's wildlife heritage," says the strategy. Virginia should take steps such as linking isolated populations, conserving and restoring native species and habitats, strengthening data and modeling, and expanding education.

"Conservation will be difficult, but not impossible," Virginia's plan challenges. □

Glenda C. Booth, a freelance writer, grew up in Southwest Virginia and has lived in Northern Virginia over 30 years, where she is active in conservation efforts.

Barn swallow

Canvasbacks

I always welcome the opportunity to try something new outdoors, especially when it is less than a few hours down the road and involves tossing out a few decoys and waiting for ducks to come in. So when the opportunity presented itself to hunt sea ducks in the Chesapeake Bay, I jumped on it quickly. The fact that I was going to hunt with some serious waterfowlers I had never hunted with before seemed an added bonus.

With Christmas just a few days behind, we set a date to hunt the bay on December 28th. As usual, I was relegated to the couch the night before the trip. I don't make a lot of friends around the house when the morning alarm goes off at 3:30 and I wake the entire family. I might not sleep quite as well on the couch, but the mere fact that I am down there means I am excited by the prospects of the following day. This morning was no different. I was out the door and headed east by 4:15.

I met up with Eric Rutherford and Brian Watkins in Poquoson. We piled into Brian's truck and headed to the boat ramp where we would meet Doug Biggs, an avid waterfowler who had driven his sea duck rig up from Bracey, near Lake Gaston. Brian and Eric went to school together at Virginia Tech and have been friends ever since. I had hunted with Eric the year before in Abingdon, but this was my first time meeting Brian, a well recognized and respected duck call maker and champion caller (see feature in December 2010 issue).

We reached the ramp a little early, stepping out of the truck and immediately noting a cold breeze blowing from the west. The forecast was for heavy winds to pick up after sunrise, and we were just hopeful we could hunt for a few hours. Doug Biggs arrived a few minutes later after his 2½-hour drive from southern Virginia. His entrance left little doubt that he is a man serious about hunting sea ducks. Behind his truck he was towing what looked like a war machine, and I guess in a way it is. His customized 21-foot Ocean, by Duck Water Boats Inc., was made to do one thing and one thing only: hunt sea ducks. Quickly loading guns and gear, we launched the boat and were on our way toward open water as the sun began to peek over the horizon.

After just a ten-minute ride into the bay, we were ready to set out our rig and give things a shot. We laid four lines of scoter decoys and anchored the boat. I have spent many, many mornings in marshes and beaver swamps hunting puddle ducks, but hunting big water like this was completely new to me.

SEA DUC

story by Tee Clarkson
photos by Eric Rutherfor

KIN'

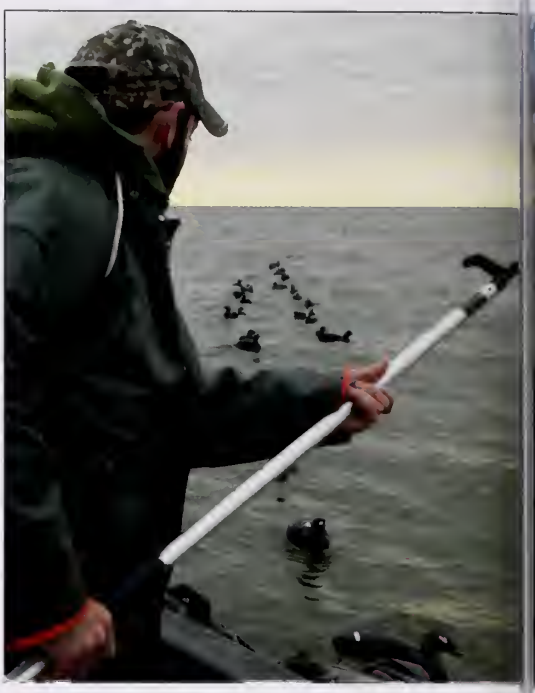
I was excited and intrigued. Within a few minutes, several black shapes appeared just above the water and maybe 100 yards downwind of the decoys. We hunkered down in the boat and Doug began waving a small black flag. The birds banked into the wind on command and glided just over the furthest of the decoys. Brian and I raised our guns and fired several shots each. The birds continued on their way unscathed. So the day began... sea ducks one, hunters zero.

Doug is a utility contractor when he is not chasing ducks. He began hunting sea ducks about five years ago when Lake Gaston and other areas where he used to hunt puddle ducks started getting too crowded. The first time he came up, he and a friend located a few birds and immediately went to Bass Pro Shops and purchased some cheap mallard decoys along with some black paint.

"We spent the whole evening in our hotel room painting those mallard decoys black," Doug said, laughing. Back then they hunted from a 16-foot boat designed more for fishing. "We killed ducks though," Doug acknowledged. "Mainly we came up here to get away from the crowds," a statement that made perfect sense as I scanned the horizon for birds, seeing nothing but water in all directions. Now Doug makes the trip up to hunt sea ducks ten or twelve times a year.

It wasn't long before more birds showed up. A single surf scoter slid into the decoys. I fired and missed again. Fortunately Doug backed me up, dropping the drake with a single shot. The most distinguishing aspect of the drakes is their colorful beak, which is a mixture of red, yellow, and white. Most of what constitute "sea ducks" in Virginia are scoters. While there are three different types, white wing, surf, and common, most of what we saw this day were surf scoters. We did spot one flock of white wings, but they were unwilling to give us a look. Oldsquaw, also referred to as long-tailed ducks or "suddelins," as Brian convinced us was their common name among those living around the bay, also show up in decent numbers in the winter. We saw a handful this morning but, again, none were willing to commit to our spread.

After an hour and only the one bird to show for it, we picked up the gear and made a move a few miles up the bay. We kicked a couple hundred birds off a shallow flat, where they had congregated to feed on



Setting and retrieving decoys in the bay during the winter months is not for the faint-hearted.

Duck Water Boats Inc. makes custom duck boats for every hunting scenario. For more information, check out their website: www.duckwaterboats.com.

With a little black paint, these mallard decoys were transformed into a more seafaring species, resembling a surf scoter (below).

clams and aquatic invertebrates, and set the spread again to see if they would trickle back. It took about another hour but, eventually, they started coming in singles and groups, decoying better at this spot, to within 20 yards on some occasions.

One good thing about shooting at a group of birds with a few other people is that it makes it easier to convince yourself that you are hitting them too. There may have been a little of that going on this morning. I am not sure I was fooling anyone other than me, however. Toward the middle of the day, a single came in and I downed it with one shot. As Brian pulled it from the net we used to pick up the birds, he held it up, jokingly saying, "We'll put this one to the side since we know you actually killed it." We all laughed.

It wasn't long before we had a dozen scoters in the boat. With the wind freshening, we decided to call it a day—which turned out to be a good decision. By the time we reached the ramp, waves were spraying over the front of the boat and the temperature had dropped 10 to 15 degrees. Although Doug considered it a slow day in terms of numbers, I considered it a success, as is any day spent outdoors with a good group of folks (some might add, crazy) who would rather be there than anywhere else, huddled in a boat, bracing against a cold wind, waiting for a duck to show up. □

Tee Clarkson is an English teacher at Deep Run High School in Henrico Co. and runs Virginia Fishing Adventures, a fishing camp for kids: tsclarkson@virginiafishingadventures.com.

Into New Te

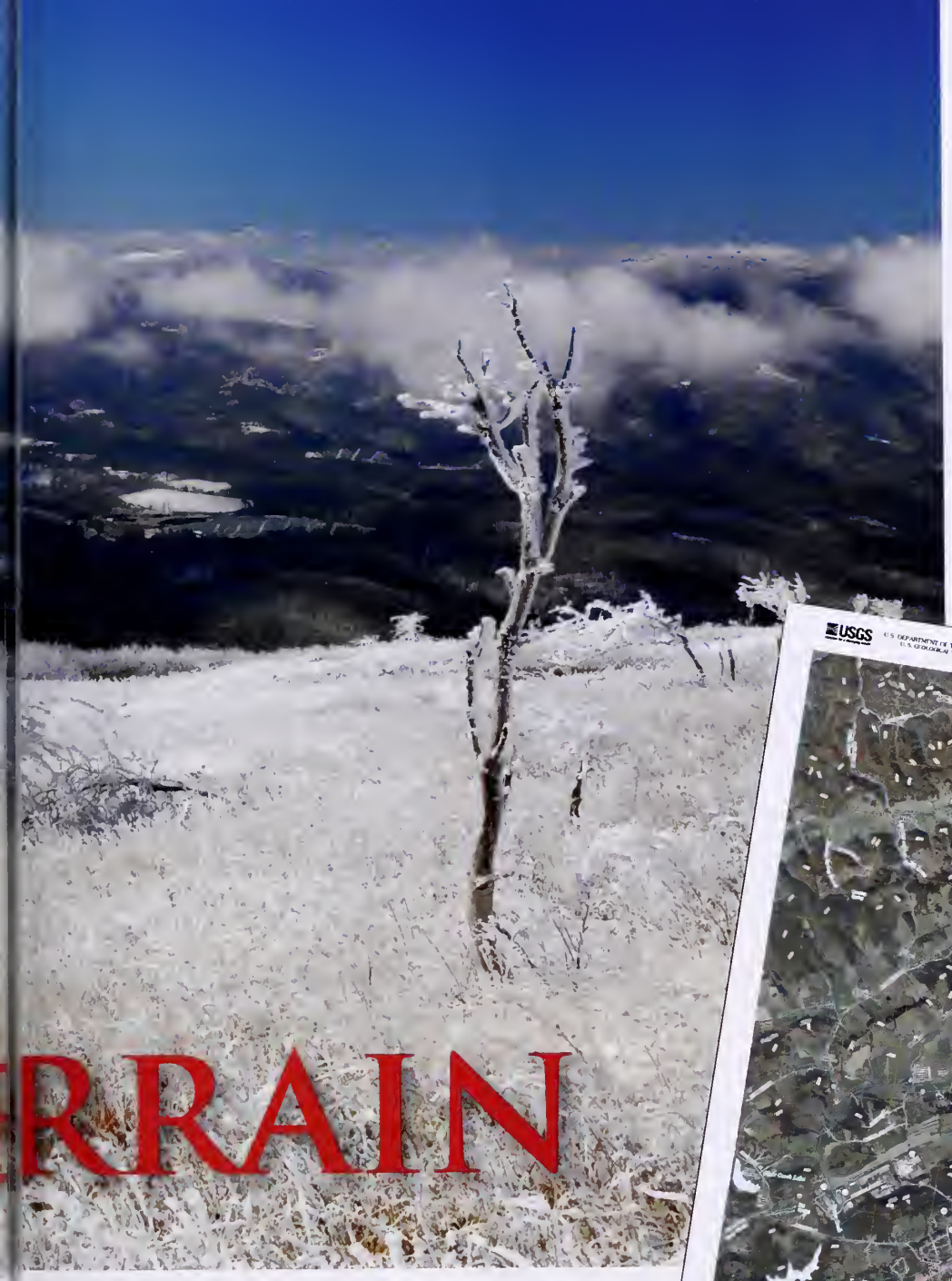
story and photos by John Ross

If moving from one house to another is not one of the ten most stressful events in life—and it isn't, according to a recent report from the U.S. Surgeon General—it ought to be. Three months after my move from Upperville to Abingdon, I'm still surrounded by clusters of half-opened boxes.

I know where my fly-fishing gear lurks because the freshwater tackle lives in a single duffel that's never far from sight. That green bag carries my working rods (all 5 or 6 section models), reels, vest, waders, and boots. But somewhere else is a mover's box that contains those 6-inch rabbit fur streamers I need for gargantuan winter browns. Maybe the grinch who superintends the mound of stuff in the garage will cough it up for the holidays.

The gun cabinet now holds rifles and shotguns, all of which arrived safe and sound. And packed away, one of those GI surplus tins that first held 20mm ammo are shells for my 16 and 20 gauges and rounds for my go-to deer rifles, a .257 Roberts and .30/'06. By the time you read this, I'll have either found the cartridges or be dining on ground turkey. Venison, I much prefer.

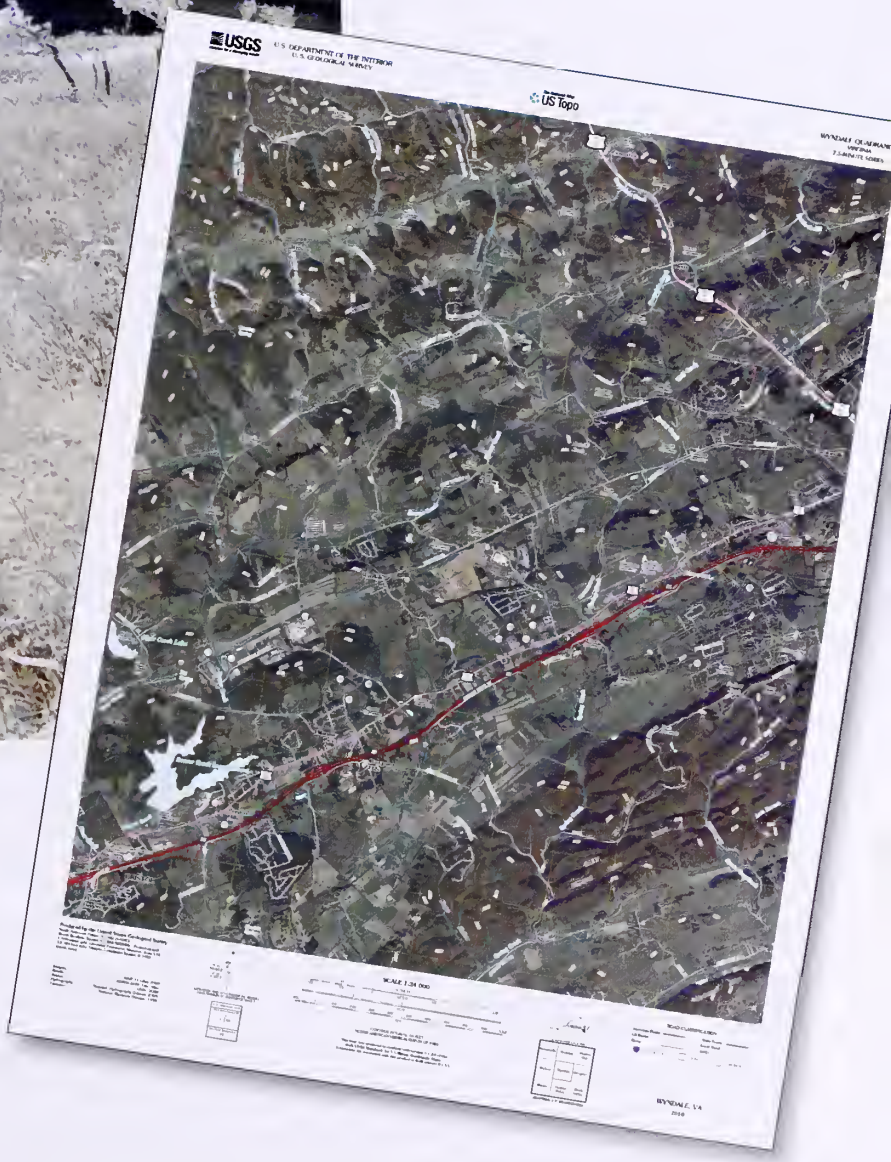
More than 500,000 Virginians moved from one county to another in 2009. Another 260,000 moved to Virginia from a different state. If you hunt or fish as I do,



learning your way around a new neck of the woods is fun, especially if a rod or shotgun is safely tucked in the trunk and your binoculars and bird books are close at hand.

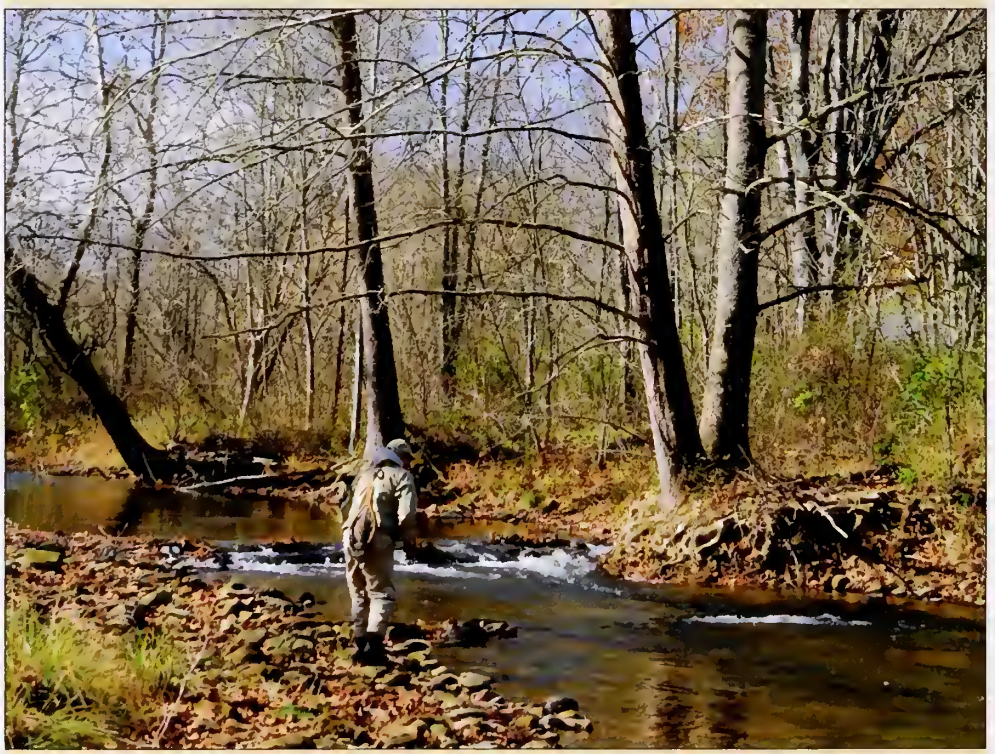
Maps, of course, are indispensible. The official Virginia transportation map carries a wealth of information. Terrain is represented by shaded relief. These maps are free at most visitor rest-stops along Interstates and downloadable online.

I've always been a fan of topographic maps produced by the U.S. Geological Survey (USGS). The agency's 7.5-minute series—which most of us know as USGS "quads" for quadrangle—feature contour lines usually set at 20-foot intervals. Today, thanks to Survey's National Map



Left spread, Whitetop Mountain in late October.
Above, author's new home is south of Abingdon's I-81 exit 14.

A view of the author's new community, Abingdon, as seen from a light plane. That excursion revealed much about the South Fork Holston watershed and its exemplary trout streams (below).



Project, individual quads can be downloaded for free.

These aren't just copies of the old or updated paper maps. Google Earth made aerial photos of the country readily available to anyone with access to a computer. U.S. Topo quads meld aerial photography with contour lines and a host of other information, including everything from the old 7.5-minute paper series. A set of buttons on the left side lets you select features you want to see and turn the others off.

If you download accompanying free software from terraGo Technologies and purchase Adobe Acrobat X Pro, you can add notes, measure distances, and integrate your maps with your GPS tracking systems and other hand-held devices. Scanning aerial photography on U.S. Topo maps and on Google Earth can give you the feeling of seeing your new home, surrounding community, and countryside beyond as if you were actually flying.

But not quite. I was a lucky kid. As a pilot instructor during World War II, my dad had to log a certain number of hours each year to maintain his Air Force Reserve standing. He'd check-out a Piper Cub and take me and my brother on flights over our neighborhood. From the air, we saw how our grandparents' farm edged the bluff over the river and how close our house really was to the school. (I thought it was a long walk.) Soon after moving to Abingdon, I arranged a flight in a light plane. I wanted to see for myself how the South Holston and Whitetop watersheds fit together and to develop an overall sense of where tributaries feed the main stems.

Turned out the pilot, Johnny White, was an angler. He knew the streams I wanted to see. On a glorious Saturday, we lifted off from Virginia Highlands airport and headed down to the South Holston tailwater east of Bristol, Tennessee. Following the river upstream we crossed the dam, flew up the lake, turned east over the South Fork, and picked up Whitetop Laurel below Damascus. From the air, the stream and the Virginia Creeper Trail alongside are clearly visible. The view convinced me to buy a bike to access the runs most distant from the road.

The head of the watershed gave way to Mount Rogers and Grayson Highlands

A brief flight in a private plane may seem extravagant, but there is no better way to quickly learn the landscape and all that it has to offer.

Websites

Virginia Department of Transportation
www.virginiadot.org/travel/maps-state.asp

U. S. Geological Survey
www.nationalmap.gov/ustopo/index.html

Google Earth
www.google.com/earth

State Park. On the park's balds, I could see ponies, and the terrain resembled the vast Canadian tundra. I made myself a promise to hike those high, brushy meadows, particularly in winter when hoar frost turns each branch into an icy weathervane and the air is so clear you can see all the way to Abingdon. Returning, we flew down the upper South Fork and circled the gorge downstream from the swinging Appalachian Trail bridge.

I've never fished the gorge but have heard many stories about the wild rainbows therein. The U.S. Forest Service and the Department (DGIF) have plans to build an access trail from Teas Road to the road that comes out at Buller hatchery. I wanted to see the site so I'll understand it better when I fish the gorge and work on the project.

Reading this, you may blanch a bit at spending $150 to hire a pilot and a plane for an hour or so. Consider this: You'll spend easily that much for a day at a theme park. Wouldn't it be great to take your kids for a real ride in the sky over the place to which they've just moved? You'll enjoy it too.

Clerks at shops where hunting and fishing and hiking and biking gear are sold are fonts of information. John Trivette at Highlands Ski and Outdoor told me about the Salt Trail rails-to-trails project that links Glade Spring with Saltville and said it might be more suitable for youth and those physically challenged than the Virginia Creeper Trail. I'll have to take a look.

When asked about places to sight-in my hunting rifles, Jerry Coleman and Allen Orr at Mahoney's of Abingdon suggested I check out Kettlefoot Rod & Gun Club near Bristol and the public range at Jacoby Creek off U.S. 421. Kettlefoot is a first-class facility with separate high power, rimfire, handgun, and trap, skeet and sporting clays ranges. The range at Jacoby Creek contains stations for targets at 25, 50, and 100 yards.

Bruce Wankel of the Virginia Creeper Fly Shop and his colleague, Tommy Cook, offer accurate where-to-go and what-to-use advice. In similar vein, check out the regional DGIF office and visit nearby state parks and local forest service and national park headquarters.

In many communities, fall or spring expositions for hunters and anglers provide the opportunity to meet guides, vendors, and leaders of outdoor sports groups that are eager for new members. When moving to a new area, don't forget to see if the conservation organizations to which you belong have chapters nearby. The local chamber of commerce, convention and visitors' bureau, library, and regional historical society are rich with ideas about things to see and do.

Moving across the state is hard work: settling kids into new schools, beginning a new job, selecting new banks and docs and dentists, choosing new churches and grocers and auto mechanics—not to mention putting away all that stuff you're now wishing you'd left behind. So much to do. Will it ever end? I suppose, but I need a break. I think of my excursions into new terrain as mini-vacations, ripe with the promise of great hunting and fishing to come. □

Former chair of the Virginia Council of Trout Unlimited, John Ross is a writer living in Abingdon. His most recent book is Rivers of Restoration *(Skyhorse Publishing, 2008).*

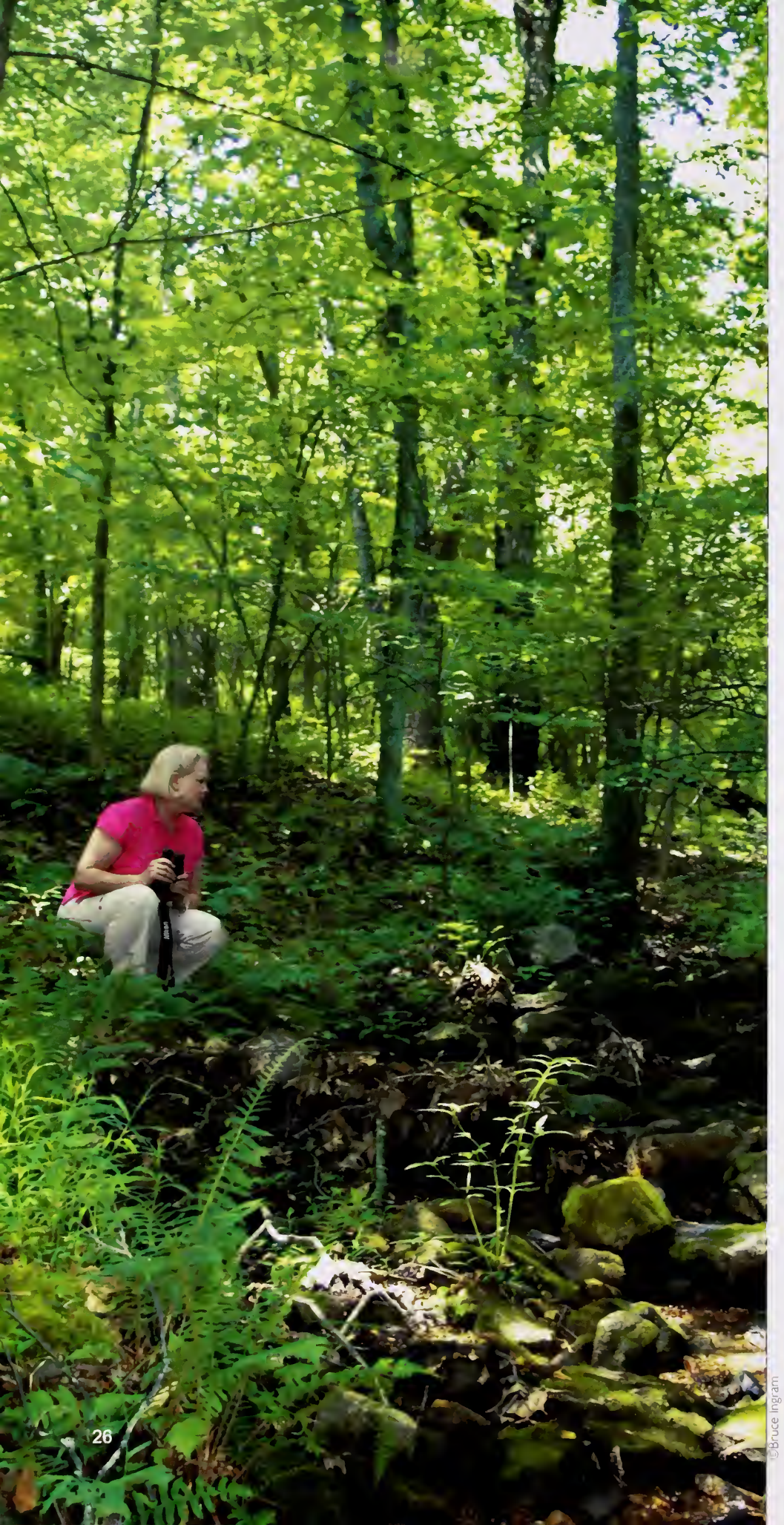
Partners

by Jenny West

The Virginia Department of Game and Inland Fisheries (DGIF) has a lot of friends, and in financially tight times, it's especially important to be able to count on your friends. In response to unprecedented challenges and out of necessity, DGIF is exploring creative and unconventional ways of doing "business as usual." Unfortunately, the constraints of a state agency framework can make it difficult, if not impossible, for DGIF to quickly and efficiently pursue new and exciting opportunities. That's what friends are for.

Last March, the DGIF board of directors signed a Memorandum of Understanding with the Wildlife Foundation of Virginia (WFV), establishing a unique partnership that will help move the agency and the foundation forward in achieving common goals. The purpose of the partnership is to develop new or enhanced fundraising opportunities in order to implement projects related to habitat management, hunting, fishing, and boating. DGIF and WFV also are committed to helping strengthen each other organizationally, through shared staff development initiatives, capital facilities projects, and education, marketing, and outreach efforts. The partnership will leverage public and private resources and capabilities to open new funding streams, which will enhance the ability of both organizations to do their jobs.

The foundation was established in 1997 as a private, not-for-profit 501(c)3 to promote outdoor recreation in Virginia. In the face of rapid land development, escalating property values, and competition spanning everything from electronic experiences to organized sports, the foundation's goal is



The Wildlife Foundation of Virginia and other partners were instrumental in the acquisition of 4200 acres of land in Rockbridge and Botetourt counties, to be managed by DGIF as the Short Hills WMA.

©Bruce Ingram

hips that Work for You

You can reach Jenny West of The Wildlife Foundation of Virginia, at www.vawildlife.org.

pretty simple: WFV wants to make sure that those who want to hunt, fish, hike, or just soak in the commonwealth's unique natural resources have the opportunity and land to do so. It's a tall order, but with friends like DGIF, it's achievable.

WFV owns 1,910 acres in Albemarle County, known as Fulfillment Farms, which are managed for no-fee public use. Many of the educational and sporting events sponsored by the foundation take place on this property, and priorities are straightforward. If you want to hunt with a young person at Fulfillment Farms, you get priority over other hunters. Through the generosity of several private individuals and organizations, foundation board members and volunteers have constructed wheelchair-accessible hunting blinds throughout the farm, making hunting an option for those with special physical challenges. In partnership with DGIF, Fulfillment Farms is now a quail demonstration area. Habitat initiatives in open lands and woods are designed to benefit quail, as well as many other species. These habitat improvements have begun to pay off, and the farm was available for two days during the 2010-11 season for a combination quail/rabbit hunt, under the DGIF quota hunt program. Each year, the foundation hosts several youth hunts and reserves opening day of general firearms season for kids. DGIF lends resources and technical assistance to these programs, which helps both organizations fulfill their missions.

Over the past decade, WFV and DGIF have collaborated on several projects, many of which involved leveraging the foundation's private resources and maneuverability to acquire lands identified by DGIF as priority acquisitions. With the ability to pursue funding avenues that are not available to DGIF as a state agency, the foundation has helped add acreage to existing wildlife management areas such as the Rapidan, Saxis, Game Farm Marsh, and Hardware River. Most recently, the foundation worked with DGIF, the Virginia Outdoors Foundation, The Conservation Fund, and private individuals to establish the new 4,200-acre Short Hills Wildlife Management Area, located in Rockbridge and Botetourt counties. The foundation has provided scholarships to DGIF staff for professional development programs, worked with agency personnel on wildlife habitat improvement projects, and supported special events such as the Spring Bass Challenge for Wounded Heroes and the Youth Waterfowl Day at Hog Island WMA. These collaborative efforts raise awareness of the importance of our hunting and angling heritage, and have helped form the basis for a more formal and meaningful partnership.

While the Memorandum of Understanding was executed just short of a year ago, there are several important partnership initiatives underway that will continue to strengthen both organizations. DGIF and WFV are looking at "business as usual" a little differently. DGIF has representation on the foundation's board of directors, and has designated a foundation liaison to maintain open lines of communication. The agency and the foundation are approaching projects with a broader perspective in mind and asking the question, "How can this program be enhanced through partnership efforts?" It's a new and fresh approach to common programs and obstacles, and is necessary to meet changing and increased challenges head-on. DGIF and WFV will look for opportunities to contribute to each other's efforts, to ensure that both organizations are sustainable, relevant, and meet constituents' needs. That's what friends are for. □

Jenny West is the Executive Director of The Wildlife Foundation of Virginia. She and her husband, Phil, and two sons live, mostly outdoors, on the banks of the Chickahominy River in Lanexa.

Dwight Dyke

Standing Up for Imperiled Fish and Wildlife

by Chris Burkett

Early in his administration, President George W. Bush worked with Congress to create State Wildlife Grants. During the past ten years, this revolutionary program has provided Virginia with more than $11.8 million to help recover imperiled species and keep other species from becoming endangered within the commonwealth. With this money, the Department (DGIF) and its partners have made remarkable progress in conserving many of Virginia's species of greatest conservation need.

Some of the more noteworthy successes include:

- Creating and implementing a nationally recognized wildlife action plan to help keep species from becoming endangered;
- Eradicating the invasive zebra mussel from Virginia's waters;
- Creating the Cavalier Wildlife Management Area to help conserve dozens of nongame species while also providing new public hunting opportunities;
- Pioneering the captive propagation of Eastern hellbenders and spiny river snails at the Aquatic Wildlife Conservation Center;
- Working to safeguard nesting shorebirds and diamondback terrapins from predators on the Eastern Shore;
- Creating and implementing one of the nation's first strategies to safeguard wildlife from the effects of climate change; and
- Leading efforts to restore freshwater mussels to the Tennessee River watershed including the largest release of endangered mussels ever attempted.

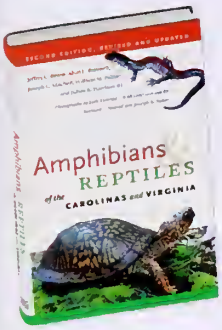
None of these projects would have been possible without the State Wildlife Grants program. In the coming decade, the challenges of habitat loss, invasive species, and new diseases will make this funding more important than ever.

Virginia's Teaming With Wildlife coalition is a statewide collection of more than 160 conservation organizations and nature-based businesses, including the DGIF, wildlife biologists, hunters and anglers, bird watchers, hikers, and others. Virginia's Teaming With Wildlife coalition is working to prevent wildlife from becoming endangered by supporting DGIF and efforts to increase funding for wildlife conservation, education, and nature-based recreation.

To learn more, please visit www.bewildvirginia.org. □

Chris Burkett is the Wildlife Action Plan Coordinator for the DGIF.

Hellbender ©Spike Knuth



OUTDOOR CLASSICS

by Beth Hester

Amphibians and Reptiles of the Carolinas and Virginia, 2nd Edition

by Beane, Braswell, Mitchell, Palmer & Harrison

2010 The University of North Carolina Press
Color photographs, tables and maps
$25.00 paper, $55.00 Hardcover
www.uncpress.unc.edu

"Amphibians and reptiles play critical roles in natural systems, and many are highly beneficial to humans. Although these animals have long appealed to amateur naturalists as well as professional zoologists, their remarkable diversity of shapes, sizes, colors, patterns, ecologies and life histories remain poorly known to most of the public…we hope this volume will become a useful reference not only to herpetologists and biologists, but to all persons concerned about the environment and quality of life in our region."

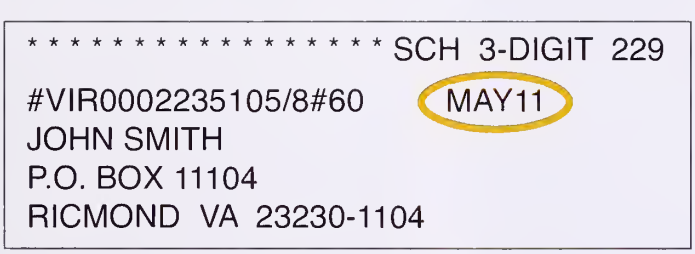
–The Authors

Readers of *Virginia Wildlife* make up a good majority of our state's hunters, anglers, and birdwatchers. Because many of our outdoor predilections require detailed observation of the natural world, many of us consider ourselves to be amateur naturalists.

Often, we tend to focus the majority of our attentions on waterfowl, upland birds, turkey, deer, trout, panfish, wildflowers, and easily identifiable insects, to the exclusion of other equally interesting forms of life. Given the diversity of the amphibians and reptiles in our region, it's a shame that snakes, salamanders, frogs, and turtles sometimes take a bit of a back seat.

This newly revised and expanded reference volume reflects the most current science and includes 30 new species, for a total of 189. Amphibians and reptiles tend to be rather secretive, unless one is actively seeking them out, but this handy reference guide makes identification a snap, and each entry is accompanied by a color photograph and range map.

The authors thoughtfully included other helpful resources: tables of added species and scientific name changes, short essays on regional climate and vegetation, and lists of the featured reptiles and amphibians by class. However, the volume works its real magic by helping us change the way we view lizards and newts, opening our eyes to the "hidden" biodiversity that surrounds us on every side. □



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Answers to the December 2010
"Byrd Nest" Crossword Puzzle

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IMAGE OF THE MONTH

Congratulations go to William Groah of Stuarts Draft for his gorgeous photograph of a waterfall in the St. Mary's Wilderness Area in Augusta County. Panasonic DMC-FZ35 digital camera, ISO 80, 1 second, f/8.0. Beautiful!

You are invited to submit one to five of your best photographs to "Image of the Month," Virginia Wildlife Magazine, P.O. Box 11104, 4010 West Broad Street, Richmond, VA 23230-1104. Send original slides, super high-quality prints, or high-res jpeg, tiff, or raw files on a disk and include a self-addressed, stamped envelope or other shipping method for return. Also, please include any pertinent information regarding how and where you captured the image and what camera and settings you used, along with your phone number. We look forward to seeing and sharing your work with our readers.

The *Lonesome Dove Hunt Club and Literary Society* was in full session, reviewing the past season's events. I ambled into the den just in time for the treasurer's report.

"I am happy to report that there is a zero balance in the club's checking account," stated ol' Money, the club's accountant. "I am well aware how stressful it is on our members when there are funds in that account, and I remember vividly the arguments that arise as to how to 'appropriate' said funds. In the interest of full disclosure, however, there was an unexpected balance of approximately $100 to the plus side of the ledger. But I partially remedied that situation by making a discretionary purchase of an 18-year-old imported product from Scotland. The fruits of that expenditure—well, you are now enjoying tonight."

"I think a vote of gratitude should be entered into the minutes of tonight's meeting," announced Doc Morrissette. "We are indeed fortunate to have such an astute and creative accountant willing to take quick and decisive action to promote harmony among the club's membership."

"You said *partially*," stated ol' Jones, ever-diligent when it comes to the club's finances. "I know how much you like to work with zeros, but may I ask what happened to that remaining balance in the account?"

"A purchase of goodwill, you might say," replied ol' Money. "You do recall that little incident with the local fire department after the last dove shoot? We were all celebrating limiting out that day by smoking cigars and, because the field was so dry, all of a sudden we had an unprescribed burn on our hands. I thought a donation to the fire department was in order. It was a good thing the fire captain is a bird hunter, or we may have had some real explaining to do!"

"Another wise spending decision!" stated Doc Morrissette. "...if only Congress could be so prudent."

"And while we are on the subject of wise and prudent decisions," continued the doctor, "I think it was a stroke of genius for ol' Jones to send out a partial list of the club's bylaws to the wives of our members. The bylaw stating that all potential members of the *Lonesome Dove Hunt Club and Literary Society* must have a wife who is considered top-notch by all of the club's members in order to be a member of *this* august body was a masterful stroke!"

Ol' Jones just sat there quietly.

"The other part of that same bylaw," added ol' Money, "states that the only way a member is asked to leave this club is when other members feel that a member's wife no longer meets the first qualification. All I have to do now is mention to my wife that we are having a membership vote at the next meeting—and things just start looking better all around. It was genius Jones, pure genius!"

Again, ol' Jones remained withdrawn. "Gentlemen... you may need to prepare yourselves for a little shock. It seems I may have overplayed my hand, and your compliments—though appreciated—may be unwarranted," he interjected rather meekly. "You see I showed my wife the bylaws to gauge her reaction before sending them on to *your* wives. My bride took this requirement to heart and set out immediately to make some improvements. At first I was extremely pleased with the results. Over a month's time, she dropped two dress sizes and looks fantastic! In order to do that, however, she has joined a health club, taken up tennis, and cut back on dinner portions at the house when she is actually home to fix dinner."

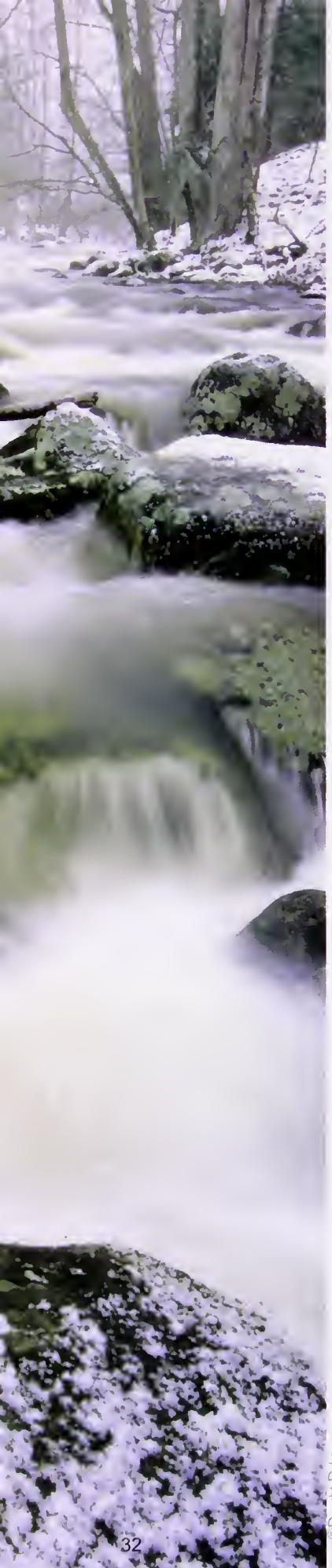
A pall of doom began to form over the membership. "On top of that, do you realize what happens when a woman loses two dress sizes?" Jones asked rhetorically. "Logic would dictate that she would go back to wearing all the clothes she has kept in the closet that she promised she would wear again someday. Gentlemen—*that does not happen!* It is off to the boutiques and the mall to purchase clothing for the 'new' woman. And it is not just dresses, but shoes and accessories as well! I am afraid that in about a month's time, your credit card statements will reflect the true cost of our collective genius.

"Sacrifices will have to be made. I have already cancelled my South Dakota pheasant hunt; it looks like the quail hunt in Georgia is in jeopardy as well. And speaking of sacrifices, it looks like I am going to miss the next two meetings. Apparently, there is something else my wife feels needs improvement. She has enrolled me in something called *Pilates!*"

Keep a leg up,
Luke

Luke is a black Labrador retriever who spends his spare time hunting up good stories with his best friend, Clarke C. Jones. You can contact Luke and Clarke at www.clarkecjones.com.

"You can have him, I'm on empty."



©Dwight Dyke

Seasonal Almanac

STELLAR EVENTS

JANUARY

4 – New Moon
10 – Deer Losing Antlers
12 – Wintering Eagle Population Peaks
15 – Great Horned Owls & Bald Eagles Begin Nesting
19 – Full Moon

FEBRUARY

2 – New Moon
4 – Wood Ducks Looking for Nest Sites
17 – Waterfowl Moving in from South
18 – Full Moon
24 – Bluebirds Seeking Nesting Sites

MARCH

4 – New Moon / Spotted Salamanders Migrate to Breeding Ponds
15 – Purple Martins Arrive
16 – Shad & Herring Move Up Tidal Rivers
18 – Walleye Begin Spawning
19 – Full Moon / Spring Hawk Migration Begins
20 – Vernal Equinox

QUIET ON THE HOME FRONT

Shorter, wintry days force many mammals—small and large—to forage later in the day and tuck in earlier at night. Those that move about may be doing so at a slower pace, but have to travel farther to acquire their next meal. Our largest mammal, the black bear, slips into a state of dormancy when outside temperatures and food options decline. In addition to traditional ground dens in large piles of brush and other debris, black bears will den in hollow trees. Cubs are generally born in mid- to late January, but do not venture out of the den until March-April They will remain with the mother, or sow, during their first year.

Other animals moving about in the woods include the turkey, the bobcat, the gray fox and red fox, and the white-tailed deer. Look for deer antlers on the ground, as bucks shed them from mid-January through early February.

With food sources scarce, it is especially important to keep garbage cans securely locked and pet food indoors. It's advisable to take down bird feeders and seed. Consider broadcasting seed on the ground instead. During snowfalls and periods of wet, windy weather, such feedings may make the difference between survival and death for feathered friends who overwinter here.

Cold-blooded reptiles like the black kingsnake live in the ground, while turtles will overwinter in leaves and soil. Frogs and salamanders and other amphibians burrow into mud banks and pond bottoms to endure the cold temps. In February, some begin to stir. The first big rain will roust them from their slumber and by early March turn their attention to breeding—often in small, ephemeral (or temporary) ponds.

During new and full moons, the gravitational pull of the sun and moon results in greater tidal action, observed in both lower and higher tides. This is especially apparent in major tributaries of the Chesapeake, near the mouth of the bay, but can be seen to the uppermost tidal reaches (generally near the fall line). Watch and listen for drama along the riverbank and in the marshes during a full moon. Late evening walks can be exciting, especially along field edges and riverbanks, where owls and hawks may be scouting a meal. The Eastern screech owl is commonly heard this time of year in farm fields and woodlands. In western areas, among hardwoods and conifers listen for barred owls and saw-whet owls.

Along the coast, winter travelers include snow geese, tundra swans, and a variety of ducks. In the western areas of the state, hawks will be moving through come late March, using mountain ridges and other topographic features for migration clues while they take advantage of prevailing wind currents. □

— SHM

PHOTO TIPS

by Lynda Richardson

Happy Horizontal Horizons

I laugh when I think back to the early 1980s when I shot basketball games for the Associated Press. As you may remember, those were the days of black and white film—Kodak TRI-X film to be exact—with an ISO rating of 400. Basketball games were held in notoriously dark coliseums, so photographers were always "pushing" their film to ISO 1600, hoping to get at least 1/125th of a second shutter speed to TRY to stop the action.

And depth-of-field? Hah, what depth-of-field? Needless to say, in my rookie years at basketball I did not produce my best work but I did learn to solve another problem.

Horizon lines! One of the most challenging aspects of shooting basketball was trying to capture the action AND have a straight horizon line—often producing hilarious results. In basketball, the horizon line was the floor. It had to be straight or it appeared that the scene was in utter chaos! (Well, sometimes it was.) So, not only did you have to concentrate on manually focusing and capturing the best action, you also had to worry about getting the floor horizontal in the frame!

Most of you will probably not be shooting basketball but you will be taking photographs where the horizon line really needs to be straight. Landscape photography is a perfect example of when you need straight horizon lines. Try shooting a picture of a landscape with a straight horizon and then an angled one. Don't you feel like you're getting seasick or dizzy looking at the one that's crooked? Doesn't it look like the scene is falling off the page? This is why I stress that you become very mindful of keeping your horizons level.

Another important issue with horizon lines is the compositional aspect. Horizon lines work best if they are not smack dab center in the frame! Using a one-third to two-thirds ratio you should learn to compose your landscape so the sky, for example, makes up only one-third of the image and the land makes up the other two-thirds, or vice versa. One of the exercises I give in my workshops is to experiment with this idea. First, select a landscape or seascape that you want to photograph. Now, shoot it with the horizon line in the center. For the next two shots you will shoot the sky as one-third of the scene and then two-thirds of the scene. Try this with several other landscapes. Make sure that your horizon lines are straight and also purposefully make them crooked. Now you should clearly see how distracting a crooked centered horizon line can be!

The next time you're shooting a scene where the horizon line comes into play, make sure it is straight and out of the center of the image. Not only will you make photographs that are well composed, you will also become a better photographer. And you didn't even have to shoot a basketball game to learn it! □

Minimizing the sky to at least 1/3rd of the image can place more emphasis on your foreground subject and make a better composition. Making sure your horizon line is straight, even with a super wide-angle shot, can keep distractions to a minimum. © Lynda Richardson

Dining In

by Ken and Maria Perrotte

Hearty Venison Soup

Summer recipes have the luxury of letting you create with lots of fresh fruits and vegetables. By January, though, it's helpful to have recipes that work well with frozen or canned ingredients. This soup always "hits the spot" when served after spending time outdoors on a brisk Virginia winter day.

Neck or front shoulder meat from a deer can contribute to fine soups and stews. But, if you're a soup aficionado, there's nothing wrong with using finer roasts and backstraps in a premium soup that is served as a main course.

Hearty Venison Vegetable Soup

1 tablespoon olive oil
1 to 1½ pounds venison stew meat, trimmed and cut into ½ inch cubes
1 teaspoon Montreal Steak Seasoning
5 cups beef broth or stock
½ pound frozen soup vegetables mix (about 2 cups)
Other vegetables (green beans are nice), optional
½ bay leaf
½ teaspoon garlic pepper
½ of a 15-ounce can diced tomatoes w/juice
Salt and pepper
2 cups rotini, macaroni or other pasta, uncooked

In a large pot or Dutch oven cook the meat, seasoned with Montreal steak seasoning, in oil over medium-high heat until liquids have evaporated. Stir meat until browned on most sides. Gradually add 3 cups of the broth, frozen vegetables, seasonings, and 3 or 4 tablespoons of juice from tomatoes. Bring to a boil, reduce heat and simmer covered, for at least an hour or until meat is tender. Add tomatoes and simmer for another 5 minutes. Add last 2 cups of broth and season to taste. Add pasta and bring back to boil. Reduce heat and simmer until pasta is soft. Adjust seasonings if needed.

Makes 4 to 6 servings

Can be made ahead of time to the point of adding pasta. This also helps concentrate flavors. This recipe is easily doubled. Heck, quadruple it and cook it in a cauldron to serve at a late season tailgate party. You can also add it to a thermos for a great duck blind or similar "brown bag" lunch.

Cheese Bread

6 to 7 ounces of mixed shredded cheeses (we like to combine Monterey Jack, sharp cheddar and Swiss, but blue cheese, gruyere, Colby or other favorites can be used)
2 ounces cream cheese, softened at room temperature
2 tablespoon butter or margarine, softened at room temperature
1 teaspoon sherry or port wine
1 teaspoon finely chopped garlic
1 tablespoon chopped parsley
1 tablespoon chopped chives
1 teaspoon chopped rosemary
1 loaf French or Italian bread

In a mixing bowl, combine shredded cheeses, softened cream cheese, and wine. Add garlic, parsley, chives and rosemary and mix well. Cut French bread into ¾-inch slices, almost all the way through. Spread and stuff cheese mixture in the cut sides with a little spilling out on the top of the loaf. Wrap the loaf in aluminum foil, open at the top, and bake at 350° for about 15 minutes or until the cheeses are melted.
Serve immediately.

Experiment with different cheeses and herbs. Additional butter can be substituted for cream cheese if desired.

Here's a nice dessert that follows up well with a hearty soup

Apple Crisp

2 ½ pounds apples, peeled and cut into 1 inch cubes (about 5 cups)
½ cup walnuts
½ teaspoon ground cinnamon
¼ cup white sugar
¼ cup brown sugar
⅓ cup orange juice
1 generous tablespoon brandy (optional)

Topping

1 cup flour
½ cup sugar
1 teaspoon baking powder
1 stick butter, softened at room temperature
Whipped cream

Mix the apple ingredients and place in a greased baking dish. Combine the topping ingredients, working until crumbly and well mixed. Place over apples in the dish.

Bake at 400° for about ½ hour or until apples are soft and topping is browned. Serve warm with whipped cream. Vanilla ice cream also works nicely if preferred. □

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